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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/370,302	08/09/1999	WILLIAM L. PUSKAS	NEUL-129DVI	7923
7590		06/22/2004	EXAMINER	
Mark G. Lappin		BELLAMY, TAMIKO D		
McDermott, Will & Emery		ART UNIT		
28 State Street		2856		
Boston, MA 02109		PAPER NUMBER		

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/370,302

Applicant(s)

PUSKAS, WILLIAM L.

Examiner

Tamiko D. Bellamy

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-31 is/are rejected.
- 7) ☐ Claim(s) 32-44 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 24-26, and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibano (JP 07163954A) in view of Jacobs et al. (6,394,111).

Re to claim 24, Shibano discloses an ultrasonic tank (e.g., ultrasonic vibrator 2 installed in tank 20), and a sensing transducer (s)(e.g., combination of electrode boards 19a, 19b). As depicted in fig. 1, Shibano also discloses a process liquid. Shibano lacks the detail of housing a sample fluid, sensing transducer within a sample fluid, and passing ultrasonic energy from the processing liquid to the sample fluid. Jacobs et al. discloses in fig. 12, a sensing transducer (e.g., single probe 70 including electrodes 72, 74) in a sampling fluid within a housing (e.g., water reservoir 81 enclosed by a cap 91) (see col. 14, lines 18-22, col. 24, lines 1-2). Therefore, to modify Shibano by employing housing a sample fluid, and a sensing transducer within the sample fluid would have been obvious to one of ordinary skill in the art at the time of the invention since Jacobs et al. teaches a apparatus for monitoring a cleaning process having these design characteristics. The skilled artisan would be motivated to combine the teachings of Shibano and Jacobs since Shibano states that his invention is applicable to a cleaning method for a workpiece and Jacobs et al. is directed to an apparatus for cleaning a device.

Re to claim 25, Shibano discloses an ultrasonic tank (e.g., ultrasonic vibrator 2 installed in tank 20), and a sensing transducer (s)(e.g., combination of electrode boards 19a, 19b). Shibano lacks the detail of the housing for a sample fluid made of polypopylene. Jacobs et al. discloses in fig. 12, a sensing transducer (e.g., single probe 70 including electrodes 72, 74) in a sampling fluid within a housing (e.g., water reservoir 81 enclosed by a cap 91) (see col. 14, lines 18-22, col. 24, lines 1-2). While Jacobs et al. does not specifically disclose that the housing (e.g., combination of water reservoir 81 and cap 91) are made of polypopylene, the selection of a known material is a design consideration clearly within the preview of one having ordinary skill in the art. Therefore, to modify Shibano by employing housing made of polypopylene would have been obvious to one of ordinary skill in the art at the time of the invention since Jacobs et al. teaches an apparatus for monitoring a cleaning process having these design characteristics. The skilled artisan would be motivated to combine the teachings of Shibano and Jacobs since Shibano states that his invention is applicable to a cleaning method for a workpiece and Jacobs et al. is directed to an apparatus for cleaning a device.

Re to claim 26, Shibano discloses a conductivity measuring means (e.g., combination of means 20 and electrode boards 19a, 19b).

Re to claims 29 and 30, Shibano discloses an analysis subsystem (e.g., judging means 21) measuring the variation of electrical conductivity within a prescribed time.

Re to claim 31, Shibano discloses an analysis subsystem (e.g., judging means 21) that is equivalent to a microprocessor.

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3. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibano (JP 07163954A) in view of Jacobs et al. (6,394,111) as applied to claims 24-26, and 29-31 above, and further in view of Condreva (6,295,873).

Re to claims 27 and 28, the combination of Shibano and Jacobs et al. discloses a sensing transducer within a sample fluid. The combination of Shibano and Jacobs et al. lacks the detail of a determining the temperature of a sample fluid. Condreva discloses a temperature sensor (8) determining the temperature of a sample fluid. Therefore, to modify the combination of Shibano and Jacobs et al. by employing a temperature sensor would have been obvious to one of ordinary skill in the art at the time of the invention since Condreva teaches an ultrasonic sensor system having these design characteristics. The skilled artisan would be motivated to combine the teachings of the combination of Shibano and Jacobs et al. and Condreva since Shibano states that his invention is applicable to a cleaning method for a workpiece including an ultrasonic transducer and Condreva is directed to an ultrasonic sensor system.

Allowable Subject Matter

4. Claims 32-44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

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5. Applicant's arguments, see pgs. 2-4, filed 6/4/04, with respect to the rejection(s) of claim(s) 24-44 under 112 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Shibano (JP 07163954A) in view of Jacobs et al. (6,394,111), and further in view of Condreva (6,295,873).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamiko D. Bellamy whose telephone number is (571) 272-2190. The examiner can normally be reached on Mondays, Tuesdays & Fridays 6:30 AM to 3:30 PM; and on Wednesdays and Thursdays the examiner 6:30 AM to 11:30 AM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

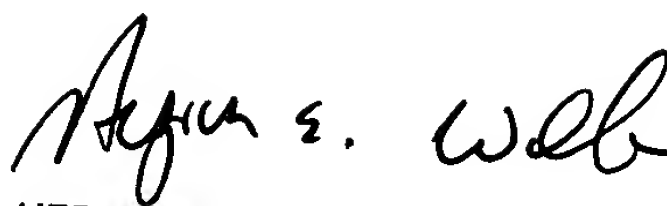
Tamiko Bellamy

T.B.
June 14, 2004

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A handwritten signature in black ink, appearing to read "Hezron Williams", followed by a long horizontal line extending to the right.

HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800